



RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

May 7, 2009

RULE 37 CASE NO. 0260352
DISTRICT 10

APPLICATION OF EOG RESOURCES, INC. FOR AN EXCEPTION TO STATEWIDE RULE 37 TO DRILL WELL NO. 5H ON THE TREGELLAS 675 LEASE, ELLIS RANCH (CLEVELAND) AND WILDCAT FIELDS, LIPSCOMB COUNTY, TEXAS.

APPEARANCES:

FOR APPLICANT EOG Resources, Inc.:

Doug Dashiell
Kim Cowherd
Rex Stout
Brad Cage

FOR PROTESTANT Harolyn Aleeyne Mitchell:

Robert Hargrove

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

APPLICATION FILED:	December 5, 2008
NOTICE OF HEARING:	January 26, 2009
HEARING DATE:	March 12, 2009
HEARD BY:	Mark Helmueller - Hearings Examiner Donna Chandler - Technical Examiner
TRANSCRIPT RECEIVED:	March 20, 2009
PDF CIRCULATION DATE:	May 7, 2009

STATEMENT OF THE CASE

EOG Resources, Inc. ("EOG") seeks a between-well spacing exception to Statewide Rule 37 to drill Well No. 5H on its 590.4 acre Tregellas 675 Lease, Ellis Ranch (Cleveland) and Wildcat Fields, Lipscomb County, Texas. The Tregellas 675 Lease is part of Section 675, Block 43 in the H & TC RR Co. Survey, a square 640 acre tract in Lipscomb County. A 40 acre window tract in the section includes a vertical well completed in the Perry (Cleveland) Field operated by Weststar Oil and Gas, Inc. The lease also excludes a 16.3 acre parcel in the southeast corner of Section 675.

The proposed horizontal well would be the fourth horizontal well on the Tregellas 675 Lease in the Ellis Ranch (Cleveland) Field. Three horizontal wells have been permitted and drilled, but only two wells, Well Nos. 2H and 3H have been completed. Additionally, EOG has filed a permit for a fifth horizontal well, Well No. 6H in the Ellis Ranch (Cleveland) Field.

The Ellis Ranch (Cleveland) Field is subject to spacing requirements of 467 feet minimum distance to the nearest lease line and 1200 feet minimum distance between wells for oil wells.¹ The proposed well requires an exception to lease line spacing requirements for the Ellis Ranch (Cleveland) Field, but none of the operators affected by a lease line spacing exception have protested the requested application. The proximity of the proposed well to the horizontal wells bracketing it triggers the between well spacing requirements under the field rules. The well would be 940 feet from Well No. 2H at its nearest point located to the west of the proposed well and 680 feet at its nearest point from Well No. 4H which is drilled, but not completed to the east of the proposed well. At its closest point, the proposed well is approximately 3685 feet from the unleased mineral interests on the section abutting the Tregellas 675 Lease to the west. A copy of the plat filed with Applicant's Commission Form W-1 (Application for Permit to Drill, Recomplete or Re-Enter) is attached for reference.

The application is protested by Harolyn Aleeyne Mitchell ("Mitchell"), the offset mineral interest owner of the adjacent western tract, Section 674. Mitchell also owns unleased mineral interests in Sections 734 and 735 which border Section 675 to the north and northwest.

DISCUSSION OF THE EVIDENCE

EOG urges that a between-well exception allowing it to drill a horizontal well at the proposed location is necessary to recover its fair share of reserves, thereby preventing confiscation. EOG did not claim that an exception was necessary to prevent waste.

¹ EOG's permit application also includes the wildcat field to a depth of 9000 feet. For the wildcat field, with the pending completion of Well No. 4H in the Ellis Ranch (Cleveland) Field, the proposed well is regular to the between-well spacing requirements.

The Ellis Ranch (Cleveland) Field is a low permeability reservoir in the Anadarko Basin. It is in the same correlative interval as the Peery (Cleveland) Field. The reservoir was formed in a fluvial-deltaic environment. EOG's net isopach map shows the field is present underneath all of section 675.

EOG's current drilling program in the field is for cased and cemented horizontal wells drilled in a north-south orientation. EOG does not drill any vertical wells in this field. Due to stress fields cause by an upthrust to the south it is impossible to initiate fractures which will propagate to the north or south. Accordingly, horizontal wells are drilled with a north-south orientation to enable fracture stimulation on an east-west axis. This effectively precludes wells from draining the reservoir situated to the north and south of the lateral. EOG contends that this will eliminate any impact of the proposed well on Mitchell's acreage to the north.

EOG believes the well will not have any effect on the Mitchell interests to the west and northwest of the Tregellas 675 Unit. EOG opines that its two existing horizontal wells, Well Nos. 2H and 3H create a no-flow boundary between the proposed Well No. 5H and the Mitchell interests to the west and northwest.

Using current pressure reports of 2500 psig for the reservoir, EOG estimates that at current conditions 1,206,112 BOE in recoverable reserves underlay its 590.4 acres on the section. EOG estimates 647,350 BOE in recoverable reserves will remain under its tract based on the estimated cumulative production for the existing and permitted wells. The proposed well will recover an additional 210,000 BOE.

There are regular locations in the southwestern area of the tract that would allow for the drilling of a vertical well or a short horizontal well of approximately 300 feet. Based on EOG's net isopach map, and the performance of the other nearby vertical wells, EOG estimates that any vertical well at a regular location in the southwestern area will recover approximately 35,000 BOE and will cost over \$1.5 million to drill.

Mitchell did not put on a direct case and therefore did not provide an alternative interpretation of EOG's opinions with respect to geology, estimated cumulative recovery or remaining recoverable oil in place under current conditions.

EXAMINERS' OPINION

EOG's evidentiary presentation was limited to discussion of the Ellis Ranch (Cleveland) Field and the need to have its well permitted at the exception location in order to prevent confiscation. Accordingly, there is no need to discuss whether the proposed well is necessary to prevent waste.

To establish entitlement to an exception to Rule 37 to prevent confiscation, an applicant must show that absent the applied-for well, it will be denied a reasonable opportunity to recover its fair share of hydrocarbons currently in place under the lease, or its equivalent in kind. The applicant must satisfy a two pronged test: 1) the applicant must show that it will not be afforded a reasonable opportunity to recover its fair share of hydrocarbons currently in place by drilling a well at a regular location; and 2) the applicant must show that the proposed irregular location is reasonable.

It is the basic right of every landowner or lessee to a fair and reasonable chance to recover the oil and gas under his property as recognized by the Texas Supreme Court in *Gulf Land Co. v. Atlantic Refining Co.*, 131 S.W.2d 73, 80 (Tex. 1939). Denial of that fair chance is confiscation within the meaning of Rule 37. *Id.* Because an application cannot seek redress for past drainage, an applicant must provide evidence that it will not be afforded an opportunity to recover the recoverable reserves currently in place under its lease - this is its fair share.

An exception to Rule 37 to prevent confiscation is granted to provide a reasonable opportunity to recover the oil and gas reserves on an operator's lease which cannot be recovered from a regular location. EOG's net isopach map of the Ellis Ranch (Cleveland) Field depicts a regular location within the confines of the reservoir. EOG was therefore required to produce evidence to rule out any regular locations in order to justify its application for a Rule 37 exception. EOG satisfied this requirement by providing an estimate of the current recoverable reserves underlying its acreage and the estimated cumulative recovery from its existing wells and a well drilled at a regular location. Additionally, EOG established that there would be no drainage of Mitchell's acreage from the proposed well. The Commission has previously approved Rule 37 exception applications on a similar basis. (*See Rule 37 Case No. 0206326: Application of Enron Oil & Gas Company for a Rule 37 Exception to Drill Well No. 12, Jones 97 Lease, Sawyer (Canyon) Field, Sutton County, Texas.* Final order entered November 21, 1995.)

EOG provided uncontested evidence that Well No. 5H would have no impact on Mitchell's interests. The stress field which limits fracture stimulation to east-west orientations demonstrates that Mitchell's interests to the north of the Tregellas 675 Lease will not be affected by the proposed well. Further, the proposed well is almost 3800 feet at its nearest point from Mitchell property located to the west of the Tregellas 675 Lease. Finally, two other horizontal wells at regular locations on the Tregellas 675 Lease create a no flow boundary between the proposed well and the Mitchell property. Accordingly, Mitchell's interests will not be affected by granting a between-well spacing exception for the proposed well.

EOG calculated its current remaining recoverable reserves based on the existing reservoir pressure and other reservoir characteristics. EOG then subtracts the cumulative estimated ultimate recovery from the previously plugged and abandoned vertical well and the 3 horizontal wells on the Tregellas 675 Unit. The calculation shows that 647,350 BOE will not be recovered by EOG's existing wells. However, this calculation is not an accurate estimate.

EOG's calculation erroneously includes both past production and future production in its estimate. This error results in an underestimation of the reserves that will not be recovered from the existing wells. Because EOG used current pressure information to determine its current recoverable reserves in place, past production is not relevant to calculating the remaining recoverable reserves under the Tregellas 675 Lease. Based on the information provided by EOG's volumetric evidence, it appears that the current recoverable reserves which will not be produced by EOG's existing wells total 835,464 BOE.

The un rebutted estimate of the current recoverable reserves for the Ellis Ranch (Cleveland) Field underlying EOG's acreage in Section 675 establishes its "fair share" of reserves. It also provides an appropriate benchmark to measure against to determine whether a well at a regular location will allow an applicant a reasonable opportunity to recover its fair share. It was undisputed that based on the performance of the Tregellas 675 Well No. 1, a vertical well at a regular location on the Tregellas 675 Lease would only recover 35,000 BOE, or less than 5% of the current remaining recoverable reserves

The examiners recommend that the proposed between well spacing exception for the Tregellas 675 Lease Well No. No. 5H therefore be approved based on: 1) EOG's uncontested evidence that the proposed well is necessary in order for it to recover its fair share of reserves underlying the Tregellas 675 Lease in the Ellis Ranch (Cleveland) Field; and, 2) the showing that Tregellas 675 Lease Well No. 5 will not adversely impact Mitchell's mineral interests on its property abutting the lease.

Based on the foregoing, the examiners recommend the Commission adopt the following findings of fact and conclusions of law.

FINDINGS OF FACT

1. At least ten day's notice of this hearing was given to the designated operator, all lessees of record for tracts that have no designated operator, and all owners of unleased mineral interests for each tract adjacent to the Tregellas 675 Lease and each tract nearer to the well than the prescribed minimum lease line spacing distance.
2. The application for a Rule 37 exception was filed properly by EOG Resources, Inc. (EOG) on Commission Form W-1 (Application for Permit to Drill, Recomplete or Re-Enter).
3. EOG seeks an exception to Statewide Rule 37 to drill Well No. 5H, on its 590.4 acre Tregellas 675 Lease.
4. The proposed horizontal well would be the fourth horizontal well on the section in the Ellis Ranch (Cleveland) Field. Three horizontal wells have been permitted and drilled, but only two wells, Well Nos. 2H and 3H have been completed. Additionally, EOG has filed a permit for a fifth horizontal well, Well No. 6H in the Ellis Ranch (Cleveland) Field.

5. The Ellis Ranch (Cleveland) Field is subject to spacing requirements of 467 feet minimum distance to the nearest lease line and 1200 feet minimum distance between wells for oil wells.
6. The proposed well requires an exception to the lease line spacing requirements for the Ellis Ranch (Cleveland) Field, but none of the operators affected by a lease line spacing exception have protested the requested application.
7. The proposed well requires an exception to the between well spacing requirements for the Ellis Ranch (Cleveland) Field as it would be 940 feet at its nearest point from Well No. 2H located to the west of the proposed well and 680 feet at its nearest point from Well No. 4H which is drilled, but not completed to the east of the proposed well.
8. The application is protested by Harolyn Aleeyne Mitchell ("Mitchell"), the offset mineral interest owner of the adjacent western tract, Section 674. Mitchell also owns unleased mineral interests in Sections 734 and 735 which border Section 675 to the north and northwest.
9. The Ellis Ranch (Cleveland) Field is a tight sand low permeability reservoir. It is in the same correlative interval as the Perry (Cleveland) Field. The reservoir was formed in a fluvial-deltaic environment.
10. There are recoverable reserves in the Ellis Ranch (Cleveland) Field under EOG's Tregellas 675 Lease that will not be recovered by existing wells on the lease.
 - a. Using current pressure of 2500 psig for the reservoir, 1,206,112 BOE in recoverable reserves currently underlies the Tregellas 675 Lease.
 - b. Subtracting the estimated future recovery from all of EOG's existing wells on the Tregellas 675 Lease from the recoverable remaining reserves in place leaves 835,464 BOE which will not be recovered by EOG's existing wells.
11. A well drilled at a regular location in the southwestern portion of the lease will not allow EOG to recover its current remaining, recoverable reserves under its tract.
 - a. Using current pressure of 2500 psig for the reservoir, 1,206,112 BOE in recoverable reserves currently underlies the Tregellas 675 Lease.
 - b. Subtracting the estimated future recovery from all of EOG's existing wells on the Tregellas 675 Lease from the recoverable remaining reserves in place leaves 835,464 BOE which will not be recovered by EOG's existing wells.

- c. A vertical well at a regular location would only recover 35,000 BOE, or approximately 5% of the current remaining recoverable reserves which will not be recovered by EOG's existing wells on the Tregellas 675 Lease.
12. A well at the proposed location will not significantly affect Mitchell's offset tracts.
- a. Due to stress fields cause by an upthrust to the south it is impossible to initiate fracture stimulation along an north-south orientation in the Ellis Ranch (Cleveland) Field.
 - b. Horizontal wells in the Ellis Ranch (Cleveland) Field are drilled with a north-south orientation to enable fracture stimulation on an east-west axis.
 - c. The east-west fracture orientation of horizontal wells completed in the Ellis Ranch (Cleveland) Field effectively precludes wells from draining Mitchell's interests situated to the north of the proposed well.
 - d. The proposed well is almost 3800 feet at its nearest point from Mitchell property located to the west of the Tregellas 675 Lease.
 - e. EOG's two existing horizontal wells on the Tregellas 675 Lease, Well Nos. 2H and 3H create a no-flow boundary between the proposed well and the Mitchell interests to the west and northwest.

CONCLUSIONS OF LAW

- 1. Proper notice of hearing was timely issued by the Railroad Commission to appropriate persons legally entitled to notice.
- 2. All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed.
- 3. The requested Rule 37 exception is necessary to provide EOG with a reasonable opportunity to recover its share of hydrocarbons from beneath its Tregellas 675 Lease, thereby preventing confiscation.
- 4. The proposed location is reasonable.


RECOMMENDATION

The examiners recommend the entry of a Final Order approving EOG's application for a Ruel 37 exception for the Tregellas 675 Lease Well No. 5H in order to prevent confiscation.

Respectfully submitted,

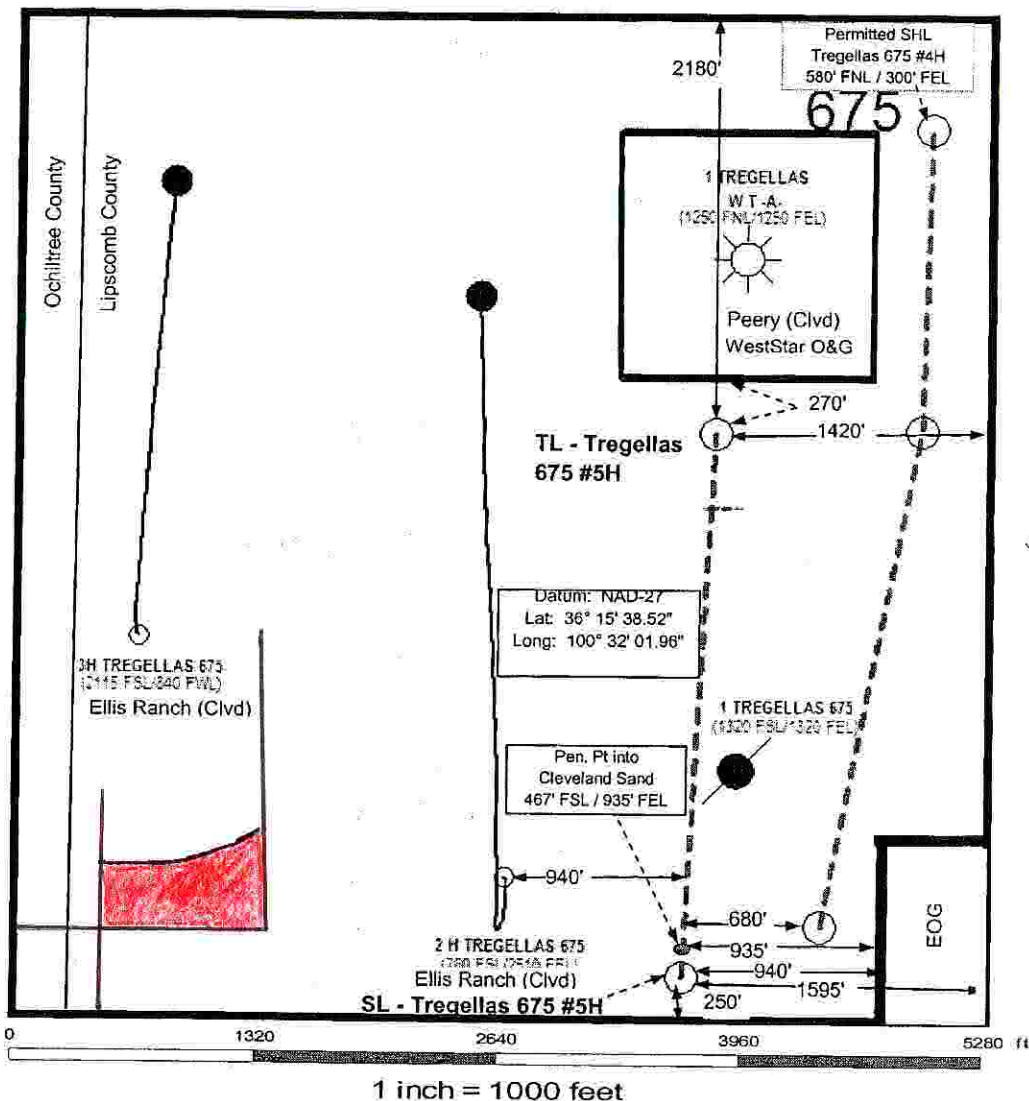


Mark J. Helmueller
Hearings Examiner



Donna Chandler
Technical Examiner

Section 675, Blk 43, H&TC RR CO. Svy, Lipscomb County, TX, A-268
EOG RESOURCES, INC.



Location Detail	
Well Name:	Tregellas 675 #5H
Surface Location:	250 FSL / 1595 FEL
Penetration Point:	467 FSL / 935 FEL
Terminus Location:	2180 FNL / 1420 FEL
GR Elevation at SL:	2588
Well Site is Located:	15 miles NW from Lipscomb ,TX
Gross Acres in Lease:	590.4

I hereby certify that this plat is true and accurate to the best of my knowledge.

By: Kim Cowherd Date: 11/25/08

Kim Cowherd

Regular locations